Case Presentation

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A seventy-eight male patient consults due to dysphagia, especially solid food dysphagia, and progressive changes in pitch. As significant medical history he just shows HBP and type 2 diabetes, receiving treatment with ACE inhibitors and metmorfin.

At physical examination we detect spine rigidity and gait impairment with loss of strength at the level of his lower limbs, especially at distal level. The patient reports progressive worsening of symptoms. We order diagnostic imaging studies.

Findings in and interpretation of imaging studies

The simple lateral X-ray of the cervical column (Figure 1) shows two prevailing findings. On the one hand, gross osteophyte proliferation in the C3-C4 space and, on the other hand, ossification of prevertebral soft tissues along the cervical column extended, although less prominently, to the thoracic column. In addition, we verify calcification/ossification foci in the nuchal ligament at the level of the cervical column and the supraspinous ligament at the level of the thoracic column.

Figure 1. Lateral X-ray of the cervical column that shows exuberant ossification in vertebral bodies from C2 to C7, and voluminous ostoephytes at C3-C4 level. Moreover, there are lineal and nodular ossifications at the level of the nuchal ligament topography.

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CT scan images (Figures 2-5) reveal similar findings and show more conspicuously that C3-C4 osteophytes cause lumen reduction in the esophagus and the airway at the level of the supraglottic larynx. MRI images (Figures 6-8) confirm lumen reduction at pharyngeal-esophageal level and also so in the airway, and allow us to verify that spinal thickness and signal are normal.

Las imágenes de la tomografía computarizada (TC) (Figuras 2-5) revelan hallazgos similares y demuestran, de manera más conspicua, que la osteofitosis de C3-C4 determina la reducción de la luz tanto a nivel del esófago como de la vía aérea a la altura de la laringe supraglótica. Las imágenes de la resonancia magnética (RM) (Figuras 6-8) confirman la reducción de la luz faringoesofágica y la vía aérea, y permiten comprobar que el grosor y la señal de la médula espinal son normales.

Resolution of the case on page 131.

Figure 2. Sagittal-reconstruction CT scan. Like Figure 1, it shows extensive ossification on the anterior aspect of the cervical column and the C3-C4 osteophyte protruding in the airway.

Figure 3. Cross-sectional-reconstruction CT scan—section at the level of the upper C4 plateau showing the dimensions of the osteophyte.

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Figure 4. Cross-sectional-reconstruction CT scan—section at the level of the C6 vertebral body revealing the ossification of the anterior longitudinal ligament (white arrows). At posterior tissues level (white arrow), there is a nodular calcification at the level of the nuchal ligament topography (arrow tip).

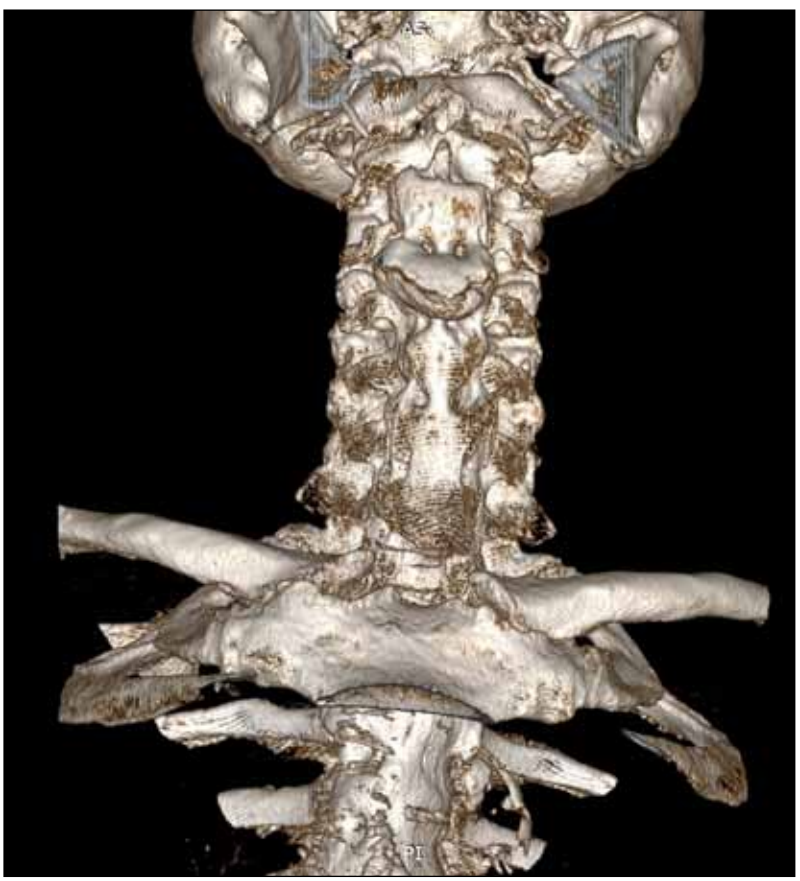

Figure 5. 3D-reconstruction CT scan.

Figure 6. Cervical column T2 (2200/105) sagittal-sequence MRI. The spinal cord is normal.

Figure 7. Thoracic column T1 (450/10) sagittal-sequence MRI that shows syndesmophytes at right antero-lateral level.

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Figure 8. Lumbar column T2 (2200/104) sagittal-sequence MRI that also shows bone bridges between vertebral bodies at right antero-lateral level, with relative preservation of the height of the vertebral interbody spaces.